

**IN THE CLAIMS:**

Please amend the claims in accordance with the following claim listing. This listing of the claims replaces and supersedes all prior listings:

1. (Canceled)
2. (Previously Presented) The method of claim 43, wherein at least two of said plurality of processing elements are updated at different speeds.
3. (Previously Presented) The method of claim 2, wherein a processing object controls the update of said at least two of said plurality of processing elements.
4. (Previously Presented) The method of claim 2, wherein one of said at least two of said plurality of processing elements operates at an acquisition speed and another of said at least two of said plurality of processing elements operates at a display speed, and wherein the acquisition speed is higher than the display speed.
5. (Original) The method of claim 2, wherein said at least two of said plurality of processing elements are idle when not updated.
6. (Previously Presented) The method of claim 2, wherein one of said at least two of said plurality of processing elements is of a cumulative type running at a first speed, and another of said at least two of said plurality of processing elements is of a non-cumulative type running at a second speed, and wherein the first speed is higher than the second speed.
- 7-10. (Canceled)

11. (Previously Presented) The method of claim 43, wherein one of said plurality of processing elements requests data from an upstream source when data is requested from it by a downstream processing element.

12. (Canceled)

13. (Previously Presented) The method of claim 43, wherein at least one of said plurality of processing elements receives M inputs on an input pin and produces N output results on an output pin, where M is an integer equal to or greater than 1 and where N is an integer equal to or greater than 0.

14-22. (Canceled)

23. (Previously Presented) The graphical processing web of claim 45, wherein at least two of said plurality of processing elements are updated at different speeds.

24. (Previously Presented) The graphical processing web of claim 23, wherein a processing object controls the update of said at least two of said plurality of processing elements.

25. (Previously Presented) The graphical processing web of claim 23, wherein one of said at least two of said plurality of processing elements operates at an acquisition speed and another of said at least two of said plurality of processing elements operates at a display speed, and wherein the acquisition speed is higher than the display speed.

26. (Previously Presented) The graphical processing web of claim 23, wherein said at least two of said plurality of processing elements are idle when not updated.

27. (Previously Presented) The graphical processing web of claim 23, wherein one of said at least two of said plurality of processing elements is of a cumulative type running at a first speed, and another of said at least two of said plurality of processing elements is of a non-cumulative type running at a second speed, and wherein the first speed is higher than the second speed.

28-31 (Canceled)

32. (Previously Presented) The graphical processing web of claim 45, wherein one of said plurality of processing elements requests processing from an upstream source when processing is requested from it by a downstream processing element.

33-42 (Canceled).

43. (Currently Amended) A method for configuring and performing processing in a digital oscilloscope processing apparatus, comprising the steps of:

receiving one or more input parameters;

defining a plurality of processing elements based upon said received one or more input parameters, each of said plurality of processing elements adapted to receive waveform data and to process the received waveform data in accordance with said corresponding input parameters, and less than all of said processing elements having update inputs activated to process the waveform data received thereby; and

graphically connecting said plurality of processing elements to define a processing web;  
wherein at least one of said plurality of processing elements having an update input responds to the activation of said update input to request ~~requests~~ processing from an upstream one of said plurality of processing elements that does not have an update input and that is idle until receipt of said request, so that upon said request, the upstream processing element performs said requested processing to process a received waveform data, and provide the processed waveform data to the at least one requesting processing element.

44. (Previously Presented) The method of claim 43, wherein the upstream one of said processing elements transmits the processed waveform data to the at least one of the plurality of processing elements requesting processed waveform data therefrom without an intervening buffer.

45. (Currently Amended) A graphical processing web defining processing in a digital oscilloscope processing apparatus, comprising:

a plurality of processing elements that are defined based upon one or more received input parameters, each of said plurality of processing elements performing a discrete processing function, each of said plurality of processing elements adapted to receive waveform data and to process the received waveform data in accordance with said corresponding input parameters, and less than all of said processing elements having update inputs activated to process the waveform data received thereby; and

a plurality of connections indicated graphically between said plurality of processing elements to define a flow of information therebetween;

wherein at least one of said plurality of processing elements having an update input responds to the activation of said update input to request ~~requests~~ processing from an upstream one of said plurality of processing elements that does not have an update input and that is idle until receipt of said request, so that upon said request, the upstream processing element performs said requested processing to process a received waveform data, and provide the processed waveform data as a result from the processing to the at least one of the plurality of processing elements requesting the processing.

46. (Previously Presented) The graphical processing web of claim 45, wherein the upstream one of said plurality of processing elements transmits the result of the requested processing to the at least one of the plurality of processing elements requesting processing therefrom without an intervening buffer.

47. (Currently Amended) A graphical processing web defining processing in a digital processing apparatus, comprising:

a plurality of processing elements that are defined based upon one or more received input parameters, each of said plurality of processing elements performing a discrete processing function, each of said plurality of processing elements adapted to receive waveform data and to process the received waveform data in accordance with said corresponding input parameters, and less than all of said processing elements having update inputs activated to process the waveform data received thereby; and

a plurality of connections indicated graphically between said plurality of processing elements to define a flow of information therebetween;

wherein at least one of said plurality of processing elements having an update input responds to the activation of said update input to request ~~requests~~ processing from an upstream one of said plurality of processing elements that does not have an update input and that is idle until receipt of said request, so that upon said request, the upstream processing element performs said requested processing to process a received waveform data, and provide the processed waveform data as a result from the processing to the one of the plurality of processing elements requesting the processing.

48. (Previously Presented) The graphical processing web of claim 47, wherein one of said plurality of processing elements requests processing from an upstream processing element when processing is requested from it by a downstream processing element.

49. (Previously Presented) The graphical processing web of claim 47, wherein the upstream processing element transmits the result of the requested processing to the at least one of the plurality of processing elements requesting processing results therefrom without an intervening buffer.